

From: Cynthia Caporale/ESC/R3/USEPA/US
Sent: 6/19/2012 8:32:18 AM
To: Kelley Chase/R3/USEPA/US@EPA
CC:
Subject: Re: EXTERNAL: Fw: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

Kelley,

We have HQ COOP here today so I am displaced from my office. I think calls will still come to my Blackberry but just in case you are trying to reach me you can call Cindy Metzger's number (4103052735).

Cindy

Cynthia Caporale, Chief
OASQA Laboratory Branch
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Fort Meade, MD
(410) 305-2732
Fax: (410) 305-3095

From: Kelley Chase/R3/USEPA/US
To: Cynthia Caporale/ESC/R3/USEPA/US@EPA
Cc: Richard Fetzer/R3/USEPA/US@EPA
Date: 06/18/2012 01:13 PM
Subject: Re: EXTERNAL: Fw: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

Hi Cindy -

Just left you a voice mail regarding this issue. I am thinking it might be easier if we talk vs e-mail. But in case we don't get a chance to talk....

From your last e-mail, I understand that R3 QASQA does not object to using the J+ qualifier in this case (see #2 and #3 below). However, based on your June 14th e-mail, it was my understanding that the lab thought that the J qualifier was more appropriate. Also, per my voice mail, I had recalled that the R3 lab was not necessarily in agreement with using the J+ qualifier during the initial sampling. However, the circumstances may have been different.

I understand that there are several acceptable approaches to qualifying the data, and that this particular situation will not have a major impact on the actual results. We will defer to the R3 QASQA's recommendations to resolve the final qualifiers.

Please call or e-mail to confirm whether R3 QASQA is recommending the J or the J+ qualifier for comments #2 and #3 below.

THANKS! - Kelley

2. The case narrative states that the detectable results for uranium were qualified estimated "J" due to a quality control sample outside of acceptance limits. Based on the information supplied in the analytical report, it is unclear what QC sample is outside of acceptance limits. Please clarify with the appropriate recoveries.

Response: The second source calibration verification and continuing calibration verification QC sample failed high for uranium (greater than 110%) . Based on SERAS data validation guidelines, data for uranium for samples HW04_R2, HW04-F_R2, HW07_R2, HW07-F_R2, HW08a_R2 and HW08a-F_R2 should be qualified estimated high (J+).

3. The case narrative states that sample results for aluminum, boron, lead and lithium for sample HW06_R2 were qualified estimated "J" due to a quality control sample outside acceptance limits. No QC information is available for boron for Batch BE23003. Based on the information supplied in the analytical report, the LCS recovery for lithium is 125%, which is outside the 85-115% range. In addition, the RPD for aluminum exceeds the 20% criterion. Based on this information, the lithium result for sample HW06_R2 should be qualified estimated high (J+) and the aluminum result estimated (J). It is unclear what QC sample is outside of acceptance limits for boron and lead. Please clarify with the appropriate recoveries.

Response: We normally do not assign estimated high (J+) based on qc recoveries. The qualifiers for lithium and aluminum are correct (J). The J was applied to lead and boron because the second source calibration verification was recovered at 112% and 106% respectively (acceptance window is 95 to 105%). Based on SERAS data validation guidelines, data for lithium, lead and boron for sample HW06_R2 should be qualified estimated high (J+). Aluminum for this sample should be qualified estimated (J).

From: Cynthia Caporale/ESC/R3/USEPA/US
To: Kelley Chase/R3/USEPA/US@EPA
Date: 06/18/2012 11:29 AM
Subject: Re: EXTERNAL: Fw: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

From the last email, [Ex. 4 - CBI] stated that the J+ qualifier would be applied. I don't object (we don't object) to this approach but I am assuming that the approach is being reviewed by others at the project level. This particular situation doesn't have a major impact to the results but probably will need a new explanation in the results package.

----- Original Message -----

From: Kelley Chase

Sent: 06/18/2012 10:45 AM EDT

To: Cynthia Caporale

Cc: Richard Fetzer

Subject: RE: EXTERNAL: Fw: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf
Hi Cindy -

I have been following the various e-mails between you and [Ex. 4 - CBI] regarding the data qualifiers for the metals results for the four home where EPA is providing water. I am checking in to see whether you have resolved the outstanding issues (discussed below) regarding the final qualifiers to be applied to the data? As you know, management has asked us to expedite the review of these results. I am hoping that we can work out the final qualifiers before COB today so that we can provide the final results to the R3 tox and HQs EU for their review.

Please let me know if you need me to set up a call with [Ex. 4 - CBI] to resolve this matter.

Thanks again for all your help - Kelley

From: Cynthia Caporale/ESC/R3/USEPA/US
To: [Ex. 4 - CBI]
Cc: Kelley Chase/R3/USEPA/US@EPA, Robin Costas/ESC/R3/USEPA/US@EPA, [Ex. 4 - CBI]
[Ex. 4 - CBI], Joe Dorsey/ESC/R3/USEPA/US
Date: 06/14/2012 09:57 AM
Subject: RE: EXTERNAL: Fw: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

Kelley and [Ex. 4 - CBI],

When a bias is suspected for a result we would use an "L" (biased low) or "K" (biased high) qualifier, which after undergoing data validation by NFG would translate to the "J-" or "J+" flags. In this situation the analyst is indicating that the results are estimated without a bias since the QC recoveries slightly exceeded criteria. The decision was to not apply a bias to all associated results based on the one outlier. Also note that the criteria used by our lab is tighter than that

used in the NFG (70-130%). However, we do not object to changing the "J" to "J+" if that is appropriate for the project-level assessment.

I need more clarification on the second comment below - "...a consensus decision to use a "J" and elevate reporting limits...." - since I thought this approach is used for low recoveries of spiked QC samples not those that have high recoveries.

Cindy

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Fax: (410) 305-3095

From: **Ex. 4 - CBI**
To: Kelley Chase/R3/USEPA/US@EPA, Cynthia Caporale/ESC/R3/USEPA/US@EPA
Cc: Robin Costas/ESC/R3/USEPA/US@EPA, **Ex. 4 - CBI**
Ex. 4 - CBI
Date: 06/13/2012 04:16 PM
Subject: RE: EXTERNAL: Fw: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

Kelley and Cindy,

I have commented on the responses provided by EPA R3. SERAS routinely uses the "J+" flag that indicates that the result is estimated but may be biased high. Based on the response to item #3 below, EPA R3 does not use the "J+" qualifier.

During the past reviews, a consensus decision to use a "J" and elevate reporting limits was agreed upon by EPA R3 and SERAS personnel since it was a viable option. In this instance, there is no reporting limit to elevate.

Since the EPA R3 analytical report does not provide information on the bias, the J+ qualifier seems to be appropriate. If EPA R3 does not want to use the J+ qualifier, then the case narrative of the report could be changed to include the bias and the flags could remain as a "J". This way we will be consistent with past qualifications.

Let me know what you think.

Ex. 4 - CBI

From: Kelley Chase [mailto:Chase.Kelley@epamail.epa.gov]
Sent: Wednesday, June 13, 2012 11:25 AM
To: **Ex. 4 - CBI** C
Cc: Cynthia Caporale; Robin Costas
Subject: EXTERNAL: Fw: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

Hi **Ex. 4 - CBI**

Please review the attached responses from R3 and let us know if you have any additional questions. If not, please follow-up with **Ex. 4 - CBI** regarding entering final qualifiers into Scribe.

THANKS !

----- Forwarded by Kelley Chase/R3/USEPA/US on 06/13/2012 11:13 AM -----

From: Cynthia Caporale/ESC/R3/USEPA/US

To: "Kelley Chase" <Chase.Kelley@epamail.epa.gov>
Date: 06/13/2012 11:10 AM
Subject: Fw: Fw: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

Here's our response.

----- Original Message -----

From: Robin Costas
Sent: 06/13/2012 11:03 AM EDT
To: Cynthia Caporale
Subject: Re: Fw: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

robin

Robin Costas, Chemist
EPA Region 3, OASQA
Ft. Meade, Md 20755
410-305-2659

From: Cynthia Caporale/ESC/R3/USEPA/US
To: Robin Costas/ESC/R3/USEPA/US@EPA, Joe Dorsey/ESC/R3/USEPA/US
Date: 06/13/2012 10:44 AM
Subject: Fw: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

This is the draft email to send out but I think more explanation is needed for at least #1.

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----- Forwarded by Cynthia Caporale/ESC/R3/USEPA/US on 06/13/2012 10:44 AM -----

From: Cynthia Caporale/ESC/R3/USEPA/US
To: Ex. 4 - CBI
Cc: Ex. 4 - CBI, Gary Newhart/CI/USEPA/US@EPA, John Gilbert/CI/USEPA/US@EPA, Kelley Chase/R3/USEPA/US@EPA, Ex. 4 - CBI, Robin Costas/ESC/R3/USEPA/US, Joe Dorsey/ESC/R3/USEPA/US
Date: 06/13/2012 08:52 AM
Subject: Re: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

The report on the Dimock Verification/Completeness Check for file 1205012 FINAL R33992 was reviewed and below are the responses for your consideration.

File 1205012 FINAL R33992 06 06 12 1230.pdf

1. All samples for lithium in project #DAS R33992 are reported down to a Reporting Limit of 25µg/L; however, the method blanks are reported to 200µg/L. If the method blanks were not analyzed with the same low standard as the samples, then the sample RLs should be raised to the concentration reported for the method blanks. Alternatively, if the samples and blanks were analyzed

using the same low standard, then the analytical report needs to be corrected to reflect the correct method blank RLs.

Response: All of the lithium quality control samples were reported using the 25ug/L Reporting Limit. The LIMS program used for reporting has a "bug" in the system which sometimes doesn't allow us to edit the Reporting Level to the correct value. This problem is being worked on. A corrected report is available if requested. No qualifications are required.

2. The case narrative states that the detectable results for uranium were qualified estimated "J" due to a quality control sample outside of acceptance limits. Based on the information supplied in the analytical report, it is unclear what QC sample is outside of acceptance limits. Please clarify with the appropriate recoveries.

Response: The second source calibration verification and continuing calibration verification QC sample failed high for uranium (greater than 110%). Based on SERAS data validation guidelines, data for uranium for samples HW04_R2, HW04-F_R2, HW07_R2, HW07-F_R2, HW08a_R2 and HW08a-F_R2 should be qualified estimated high (J+).

3. The case narrative states that sample results for aluminum, boron, lead and lithium for sample HW06_R2 were qualified estimated "J" due to a quality control sample outside acceptance limits. No QC information is available for boron for Batch BE23003. Based on the information supplied in the analytical report, the LCS recovery for lithium is 125%, which is outside the 85-115% range. In addition, the RPD for aluminum exceeds the 20% criterion. Based on this information, the lithium result for sample HW06_R2 should be qualified estimated high (J+) and the aluminum result estimated (J). It is unclear what QC sample is outside of acceptance limits for boron and lead. Please clarify with the appropriate recoveries.

Response: We normally do not assign estimated high (J+) based on qc recoveries. The qualifiers for lithium and aluminum are correct (J). The J was applied to lead and boron because the second source calibration verification was recovered at 112% and 106% respectively (acceptance window is 95 to 105%). Based on SERAS data validation guidelines, data for lithium, lead and boron for sample HW06_R2 should be qualified estimated high (J+). Aluminum for this sample should be qualified estimated (J).

4. For sample IDW-01, it is unclear what set of QC should be used to qualify samples. Please clarify that this sample was analyzed with Batch BE22502.

Response: This sample was analyzed with Batch BE3003 for ICPMS 200.8 and BE22502 for ICP 200.7. Based on this information, this reviewer agrees with the "J" flag applied to the silver result.

5. The following samples had analytes that exceeded the federal maximum contaminant levels (MCLs): Aluminum for HW06_R2; iron for HW06_R2; and manganese for HW07_R2 and HW08a_R2 and HW08-F_R2. IDW-01 is not a drinking water sample so any concentrations exceeding the MCLs are not included in the list.

Response: No response needed. No qualifications are required.

6. There were several non-typical metals that were detected in some of the drinking water samples for which no MCLs are available: Boron for HW06_R2 and HW06-F_R2, uranium for HW04_R2, HW04-F_R2, HW07_R2, HW08a_R2 and HW08a-F_R2; and lithium for HW06_R2 and HW06-F_R2.

Response: No response needed. No qualifications are required.

7. It is assumed that all required instrument QC in the method was run (with the exceptions noted in the case narrative) and was within the criteria listed in the EPA R3 SOPs since this information is not available in the laboratory report.

Response: Correct No qualifications are required.

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From: [redacted] **Ex. 4 - CBI**
To: Cynthia Caporale/ESC/R3/USEPA/US@EPA, Kelley Chase/R3/USEPA/US@EPA
Cc: Gary Newhart/CI/USEPA/US@EPA, John Gilbert/CI/USEPA/US@EPA, [redacted] **Ex. 4 - CBI**
Date: 06/11/2012 02:12 PM
Subject: Verification/Completeness Check for Dimock R3 File 1205012 FINAL R33992 06 06 12 1230.pdf

.....is attached for your review and consideration. I made a correction on the footer.

[redacted] **Ex. 4 - CBI**

Lockheed Martin
Scientific, Engineering, Response and Analytical Services (SERAS)

Ex. 4 - CBI

[attachment "SERAS-172-DSR-061112_59.docx" deleted by Cynthia Caporale/ESC/R3/USEPA/US]